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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,115	09/16/2003	Mark Scott	3831 P 004	1821
23424	7590	06/22/2005	EXAMINER	
WALLENSTEIN WAGNER & ROCKEY, LTD 311 SOUTH WACKER DRIVE 53RD FLOOR CHICAGO, IL 60606			JULES, FRANTZ F	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/663,115

Applicant(s)

SCOTT, MARK

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-25 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitation of "a channel extending between the lower portion of the reservoir and the draft chamber" in claim 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitation of "a channel extending from the upper portion of the reservoir and the draft chamber and a channel extending between the lower portion of the reservoir and the draft chamber" in claim 19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 13-15, 18, 20, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Monaco et al (US 6,357,612).

Monaco et al disclose a rail car cushioning device connected to a coupler, being switchable between a locked mode and a cushioning mode, comprising a housing comprising a hydraulic cylinder, a front head, a rear head and a reservoir (42), the hydraulic cylinder (44) extends between the front head and the rear head defining a chamber; a piston (46), comprising a piston rod extending through the front head into the chamber and a piston head carried in the piston chamber, the piston being responsive to buff and draft impacts; and, a valve assembly (72) in fluid communication with the cylinder including, a valve body 75) having an inlet opening and an outlet opening (74) defining a passageway, a valve member (76) interposed in the passageway being movable between an open position and a closed position to control fluid flow through the passageway, see figs. 8 and 10.

The device further includes one or more ports located in the inner wall proximate to the rear head enabling fluid flow between the reservoir and the buff chamber, and a one-way check valve disposed in the port enabling fluid to flow into the buff chamber from the reservoir during draft movement of the piston in accordance with claim 22-23.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-6, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monaco et al (US 6,357,612) in view of Cope (US 3,599,803). Monaco et al teach all the limitations of claims 5-6, 9, 21 and 24 except for a cushioning device comprising a controller in communication with valve actuator. The general concept of providing a controller in communication with valve actuator in a railcar cushioning device is well known in the art as illustrated by Cope which disclose the teaching of a controller in communication with valve actuator associated with a piston and cylinder assembly, see abstract section. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cope to include the use of a controller in communication with valve actuator in his advantageous rail car cushioning device in order to coordinate the operation of the cushioning device with the opening and closing of the coupler thereby improving the performance of the system.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monaco et al (US 6,357,612) and Cope (US 3,599,803), as applied to claim 1 above, and further in view of Seay et al (US 5,586,669).

Monaco et al and Cope teach all the limitations of claim 7 except for a cushioning device comprising a proximity sensor that send car approaching signal to the controller.

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The general concept of providing a proximity sensor that send signal to the controller in a railcar cushioning device is well known in the art as illustrated by Seay et al which disclose the teaching of a proximity sensor that send positioning signal to the controller see abstract section. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cope to include the use of a controller in communication with valve actuator in his advantageous rail car cushioning device in order to coordinate the operation of the cushioning device with the opening and closing of the coupler thereby improving the performance of the system.

7. Claims 8, 11, 15, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monaco et al (US 6,357,612) in view of Seay (US 3,301,410).

Monaco et al teach all the limitations of claims 8, 11, 15, 23 except for a metering pin extending outwardly from a piston head toward a rear head having an opening with an orifice disposed therein. The general concept of providing a metering pin extending outwardly from a piston head toward a rear head having an opening with an orifice disposed therein is well known in the art as illustrated by Seay et al which disclose the teaching of a metering pin extending outwardly from a piston head toward a rear head having an opening with an orifice disposed therein, see Fig. 1ion. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Monaco to include the use of a metering pin extending outwardly from a piston head toward a rear head having an opening with an orifice disposed therein in his advantageous rail car

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cushioning device in order to guide the piston of the cushioning device thereby improving the performance of the system by reducing slack in the system.

8. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monaco et al (US 6,357,612) in view of Carle et al (US 4,040,523).

Monaco et al teach all the limitations of claims 16-17 except for a cushioning device comprising at least one channel in the piston head including an overload protection valve extending through the piston head. The general concept of providing at least one channel in the piston head including an overload protection valve extending through the piston head is well known in the art as illustrated by Carle et al which discloses the teaching of at least one channel in the piston head including an overload protection valve extending through the piston head, see figs. 7-10, col 7, lines 11-20. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Monaco et al to incorporate the use of at least one channel in the piston head including an overload protection valve extending through the piston head in his advantageous railcar cushioning device in order to control fluid flow between the low pressure chamber and the high pressure chamber as disclosed in col 7, lines 12-15.

9. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monaco et al (US 6,357,612) in view of Zanow (US 3,525,449).

Monaco et al teach all the limitations of claims 16-17 except for a cushioning device comprising at least one channel in the front head for allowing fluid to enter the draft chamber from the reservoir. The general concept of providing at least one channel in the front head for allowing fluid to enter the draft chamber from the reservoir in a



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cushioning device is well known in the art as illustrated by Zanow which discloses the teaching of at least one channel (138) in the front head for allowing fluid to enter the draft chamber from the reservoir. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Monaco et al to incorporate the use of at least one channel in the front head for allowing fluid to enter the draft chamber from the ... reservoir in his advantageous railcar cushioning device in order to provide a buffer capable of high energy dissipation as disclosed in col 1, lines 37-43.

#### ***Allowable Subject Matter***

10. Claims 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

11. Applicant's arguments filed 05/11/2005 have been fully considered but they are moot in view of the new grounds of rejection.

#### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Pepper is cited to show a related cylinder head with check valve.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 272-

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6681. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules  
Primary Examiner  
Art Unit 3617

FFJ

June 18, 2005

**FRANTZ F. JULES**  
**PRIMARY EXAMINER**

